

What is claimed is:

1. A niobium powder having a nitrogen content of at least about 500 ppm by weight and not more than about 7,000 ppm by weight, and having a mean particle diameter of at least about 0.2 μm and less than about 3 μm , which contains as impurity at least one element M selected from the group consisting of iron, nickel, cobalt, silicon, sodium, potassium and magnesium in an amount such that each element M is not more than 100 ppm by weight, or the total amount of the elements M is not more than 350 ppm by weight.

2. The niobium powder according to claim 1, which has a mean particle diameter of at least about 0.5 μm and less than about 2 μm .

3. The niobium powder according to claim 1, which has a nitrogen content of at least about 1,000 ppm by weight and not more than about 3,000 ppm by weight.

4. A sintered body produced from a niobium powder, which has a specific leakage current index of not more than about 400 $[\text{pA}/(\mu\text{F}\cdot\text{V})]$.

5. The sintered body according to claim 4, which has a specific leakage current index of not more than about 200 $[\text{pA}/(\mu\text{F}\cdot\text{V})]$.

6. A sintered body produced from a niobium powder, said niobium powder having a nitrogen content of at least about 500 ppm by weight and not more than about 7,000 ppm by weight, and having a mean particle diameter of at least about 0.2 μm and less than about 3 μm .

7. The sintered body according to claim 6, wherein said niobium powder has a mean particle diameter of at least about 0.5 μm and less than about 2 μm .

8. The sintered body according to claim 6, wherein said niobium powder has a nitrogen content of at least about 1,000 ppm by weight and not more than about 3,000 ppm by weight.

9. The sintered body according to claim 6, wherein said

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niobium powder contains as impurity at least one element M selected from the group consisting of iron, nickel, cobalt, silicon, sodium, potassium and magnesium in an amount such that each element M is not more than 100 ppm by weight, or the total amount of the elements M is not more than 350 ppm by weight.

10. The sintered body according to claim 6, which has a specific leakage current index of not more than about 400 $[pA/(\mu F \cdot V)]$

11. The sintered body according to claim 6, which has a specific leakage current index of not more than about 200 $[pA/(\mu F \cdot V)]$.

12. A capacitor comprising (i) an electrode, wherein the electrode is a sintered body produced from a niobium powder, (ii) a counter electrode, and (iii) a dielectric intervening between the two electrodes; said niobium powder having a nitrogen content of at least about 500 ppm by weight and not more than about 7,000 ppm by weight, and having a mean particle diameter of at least about 0.2 μm and less than about 3 μm .

13. The capacitor according to claim 12, wherein said niobium powder has a mean particle diameter of at least about 0.5 μm and less than about 2 μm .

14. The capacitor according to claim 12, wherein said niobium powder has a nitrogen content of at least about 1,000 ppm by weight and not more than about 3,000 ppm by weight.

15. The capacitor according to claim 12, wherein said niobium powder contains as impurity at least one element M selected from the group consisting of iron, nickel, cobalt, silicon, sodium, potassium and magnesium in an amount such that each element M is not more than 100 ppm by weight, or the total amount of the elements M is not more than 350 ppm by weight.

16. The capacitor according to claim 12, wherein said sintered body has a specific leakage current index of not more than about 400 $[pA/(\mu F \cdot V)]$.

17. The capacitor according to claim 12, wherein said sintered body has a specific leakage current index of not more

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than about 200 [pA/(μ F·V)].

18. The capacitor according to claim 12, wherein said dielectric is formed on a surface of the sintered body.

19. The capacitor according to claim 12, wherein said dielectric is composed of niobium oxide.

20. The capacitor according to claim 12, wherein said dielectric is composed of niobium oxide formed by electrolytic oxidation on a surface of the sintered body.

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